Trans Com Roles, Responsibilities, Schedule

February 21, 2019
• Metropolitan Planning Organization (MPO)
• Responsible, in collaboration with UDOT, UTA, and local governments for developing and approving long- and short-range transportation plans and programs
• Provides opportunities to address transportation and growth needs
Origin and Role of Trans Com

- Established by Memorandum of Agreement among WFRC, UDOT, and UTA
- Continuous, comprehensive, and cooperative planning process
- Advise Regional Council on short-range planning and programming
Transportation Improvement Program

- Six-year program of highway, transit, and active transportation projects to which funding has been committed
- Last two years are projects in concept development
- Includes federal, state, and locally funded projects
- Updated annually
Trans Com Responsibilities

• Approve draft Transportation Improvement Program (TIP) for public comment
• Recommend TIP for approval
• Recommend or approve amendments to TIP
• Recommend projects for Surface Transportation Program (STP), Congestion Mitigation Air Quality (CMAQ) Program, and Transportation Alternatives Program (TAP)
• Provide input on transportation priorities
Trans Com Schedule

**TIP**
- June – Release TIP for public comment
- August - Recommend TIP approval
- Each meeting – TIP Amendments

**STP, CMAQ, TAP**
- November – Review letters of intent
- April – Recommend STP, CMAQ, and TAP
Transportation Improvement Program
Transportation Improvement Program is...

1. Six Year Program of Highway, Transit, and Active Transportation Projects
   • Four Years Funded - Two Years Concept

2. In the Urban Areas
   • Salt Lake/ West Valley - Ogden/ Layton

3. Funded by
   • Federal, State, & Local Programs

4. For All Cities, Counties, UDOT & UTA
Transportation Improvement Program will . . .

1. Implement the Long Range Plans
   • Highway/Transit and Active Transportation Projects for the Region

2. Help Meet the Short Range Needs
   • Of the Wasatch Front Area

3. Provide for the Maintenance
   • Of the Existing Transportation System
Transportation Improvement Program Contains....

- Lists of Projects
- Including:
  - New Construction
  - Rehab & Maintenance
  - Safety/ ITS
  - Transit, O & M
  - Pedestrian & Bike
Projects in the TIP:

- Represent $ Millions
- Thousands of Jobs
- Economic Growth & Development
- Mobility/ Access
- Preservation of Life
- And Promote the Quality Of Life
Federal Law Requires:

- Financially Constrained
- Conform To Air Quality
- Reviewed By the Public
- Approved by Regional Council
Process for New Projects & The Draft TIP

- **SEPT / OCT**: Letters of Intent
- **NOV / DEC / JAN**: Project Evaluation Concept Reports
- **FEB / MAR**: Project Reviews and Evaluations
- **APR / MAY**: Draft Projects/Draft Programs
- **JUNE**: Draft TIP
- **JULY**: Public Review & Comment
- **AUG**: Review and Approve TIP
- **SEPT**: FHWA and FTA Review / Approve TIP
- **OCT**: Initiation of the New TIP / STIP
5a. Report on Approved Board Modification
   • Regional Council – January 24, 2019

5b. Approve New Board Modification
   • To the 2019-2024 TIP

5c. Review the Federal Funds Obligated during this past Federal Fiscal Year 2018
5a - 2019-2024 TIP Board Modification

Wasatch Front Regional Council
January 24, 2019

Ben Wuthrich
Wasatch Front Regional Council
<table>
<thead>
<tr>
<th>County</th>
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<th>Year</th>
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</thead>
<tbody>
<tr>
<td>Salt Lake</td>
<td>West Valley City</td>
<td>4100 South</td>
<td>1483H</td>
<td>4100 South; Bangerter Highway to 5460 West Project</td>
<td>Reconstruction with minor improvements to Drainage, Curb, Gutter and Sidewalk</td>
<td>LOCAL_GOVT (Local Government Funds)</td>
<td>$20,718,478</td>
<td>$0</td>
<td>Additional Funding</td>
<td>$4,230,000</td>
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<td>LOCAL_MATCH (Local Matching Funds)</td>
<td>$815,311</td>
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<td>$4,445,484</td>
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<td>L_BETTERMENT (Local Government - Betterment CO-OP)</td>
<td>$3,421,462</td>
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<td>$20,718,478</td>
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<td></td>
<td>STP_HIF_SL (Highway Infrastructure Funds - Salt Lake)</td>
<td>$7,806,221</td>
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<td>$20,718,478</td>
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<td></td>
<td>STP_URB_SL (Surface Transportation Program - Urban Area Salt Lake (WFRC))</td>
<td>$7,806,221</td>
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<td>$20,718,478</td>
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</tbody>
</table>

West Valley City, in coordination with UDOT and WFRC, will fully reconstruct 4100 south between Bangerter Highway and 5460 West. The current project value is $12.3 million. • Granger Hunter Improvement District will be adding $3.94 million as a betterment to replace water lines. • West Valley City will be adding $426K as a betterment for landscaping and buried power. • West Valley City will also be adding $4.23 million to complete the project as originally scoped.

<table>
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<th>Salt Lake</th>
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<tbody>
<tr>
<td>Salt Lake</td>
<td>UDOT</td>
<td>SR-154</td>
<td>14415</td>
<td>Bangerter Highway Interchange Projects at 6200 South, 10400 South, and 12600 South</td>
<td>New Construction of Grade Separated Interchanges</td>
<td>ST_TIF (State Transportation Investment Fund)</td>
<td>$182,000,000</td>
<td>$159,000,000</td>
<td>Additional Funding</td>
<td>$23,000,000</td>
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</table>

Region Two is requesting to add $23,000,000 of ST_TIF funds to this project. Initial cost estimates for these intersection/ interchanges were re-evaluated due to recent pricing that has been encountered on previous interchanges. The additional funds being requested are to address increased right-of-way costs, project material and labor escalation costs at all 3 interchanges. The projects will be combined into one project (PIN 14415). Combining these projects will allow for better coordination with work activities and impacts to the public. These projects are scheduled to be constructed in 2020. Projects include - (6200 South @ Bangerter Highway) with a project value of $64,000,000, - (10400 South @ Bangerter Highway) with a project value of $46,000,000, - (12600 South @ Bangerter Highway) with a project value of $49,000,000.

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<tr>
<td>Salt Lake</td>
<td>UDOT</td>
<td>I-15</td>
<td>15669</td>
<td>I-15; NB Bangerter Highway to I-215</td>
<td>Add a Lane and Construction of a collector/ distributor System</td>
<td>ST_TIF (State Transportation Investment Fund)</td>
<td>$165,000,000</td>
<td>$150,000,000</td>
<td>Additional Funding</td>
<td>$15,000,000</td>
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</table>

Region Two is requesting to add an additional $15,000,000 ST_TIF funds to the I-15 Northbound Bangerter Highway to I-215 project. The cost increase on this project is coming from escalations in Design-Build construction activities (labor and materials) and higher than anticipated right of way costs. The I-15 NB project will improve traffic operations on I-15 between Bangerter Highway and I-215. The improvements include a collector/distributor system between approximately 9400 South and I-215 and an additional general purpose lane from Bangerter Highway to 9400 South.
### Additional Funding

#### Salt Lake/ West Valley Urban Area

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<tr>
<td>Salt Lake</td>
<td>Bluffdale</td>
<td>Porter Rockwell Boulevard</td>
<td>13112</td>
<td>Porter Rockwell Blvd (Fourth Segment); East Jordan Canal and 15800 South to 0.5 miles east</td>
<td>New Construction of a 5-lane facility</td>
<td>STP_URB_SL (Surface Transportation Program - Urban Area Salt Lake (WFRC))</td>
<td>$12,161,100</td>
<td>$438,337</td>
<td>Add'l Funding</td>
<td>$3,000,000</td>
<td>2019</td>
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<td>LOCAL_INKIND (Local In Kind (Soft Match))</td>
<td>LOCAL_GOVT_SLCO (Local Gov - Salt Lake County - Transportation Choice Fund (4th Quarter))</td>
<td>$6,036,363</td>
<td>$2,000,000</td>
<td>Add'l Funding</td>
<td>$2,000,000</td>
<td>2019</td>
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</table>

Bluffdale is requesting approval of additional funding for the Porter Rockwell Blvd - Segment 4. This segment will complete the section between Segment 5 and the bridge to be constructed following the completion of segment 4. The bridge is being funded through the Transportation Investment fund (TIF). Once completed this facility will function as a major arterial road that extends from Mountain View Corridor in Herriman to I-15. Reasons for the increased project cost include a much higher construction rate of inflation than originally estimated, an increased amount of roadway excavation for lowering the road profile, and the reduction of side slopes to a less steep slope because of poor soils. The City is currently coordinating with UDOT, Salt Lake County, and WFRC to remedy the project funding shortfall to enable the project to advertise as quickly as possible to minimize additional project cost inflation.

#### Ogden/ Layton Urban Area

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<tr>
<td>Davis</td>
<td>UDOT</td>
<td>SR-105</td>
<td>16434</td>
<td>Parrish Lane (SR-105); I-15 to Main Street (SR-106)</td>
<td>Pavement Rehabilitation</td>
<td>STP_FLX_ST (Surface Transportation Program - Flexible (Any Area) Statewide)</td>
<td>$1,900,000</td>
<td>$1,400,000</td>
<td>Add'l Funding</td>
<td>$500,000</td>
<td>2019</td>
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</table>

Region One is requesting to add an additional $500,000 ST_FLX_ST funds to the Parrish Lane (SR-105) rehabilitation project. The additional funds for this request are available from the unprogrammed balance in Region One’s Transportation Solutions Program. The funding addition is needed to offset the increased cost of materials from the original Engineer’s Estimate.
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<tbody>
<tr>
<td>Davis</td>
<td>UDOT</td>
<td>SR-93</td>
<td>16664</td>
<td>SR-93 Intersection Improvements at Wildcat Way</td>
<td>Intersection Improvements</td>
<td>ST_TRANS_SOL</td>
<td>$235,000</td>
<td>$0</td>
<td>New Project</td>
<td>$235,000</td>
<td>2019</td>
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<tr>
<td>Region One is requesting to add a new project to improve the intersection at SR-93 and Wildcat Way. The additional funds for this request are available from the unprogrammed balance of Region One’s Transportation Solutions Program. This project is currently on the Region’s unfunded transportation priority list. The Region has developed a solution to increase the queue length for the left hand turn from SR-93 to northbound Wildcat Way. Currently the left hand turns are backing into thru traffic and this project will increase storage or provide dual left turns at this intersection, and will improve the overall intersection operation.</td>
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<tbody>
<tr>
<td>Davis</td>
<td>UDOT</td>
<td>SR-227 &amp; SR-225</td>
<td>17227</td>
<td>Farmington 200 West (SR-227); I-15 to Main Street and Park Lane (SR-225); Main Street to Lagoon Frontage Rd</td>
<td>Pavement Rehabilitation</td>
<td>STP_FLX_ST</td>
<td>$3,250,000</td>
<td>$0</td>
<td>New Project</td>
<td>$3,250,000</td>
<td>2019</td>
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<tr>
<td>Region One is requesting to add a new project, to improve the pavement sections identified on 200 West and Park Lane. The pavement on these two sections of SR-227 and SR-225 is beginning to degrade faster than anticipated. The proposed pavement rehabilitation will prolong the overall life of the existing pavement sections. The $3,250,000 in additional STP_FLX_ST funds comes from the available unprogrammed balance of the Region One Transportation Solutions Program.</td>
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5b - 2019-2024 TIP
Board Modification

Trans Com
February 21, 2019

Ben Wuthrich
Wasatch Front Regional Council
### 2019-2024 Transportation Improvement Program (TIP) (Amendment Four)

#### Additional Funding

**Salt Lake/ West Valley Urban Area**

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<tr>
<td>Salt Lake</td>
<td>Sandy</td>
<td>Sego Lily</td>
<td>15909</td>
<td>Sego Lily Drive (10000 South) &amp; State Street Interesction</td>
<td>Intersection Improvement</td>
<td>STP_URB_SL</td>
<td>$1,591,000</td>
<td>$1,143,054</td>
<td>Funding Removed</td>
<td>$1,143,054</td>
<td>2019</td>
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</table>

Sandy City requests that this project be removed to increase the level of available funding. The City will construct this project at a later time with development and their own resources.

**Salt Lake/ West Valley Urban Area**

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<tbody>
<tr>
<td>Salt Lake</td>
<td>Sandy</td>
<td>450 West</td>
<td>14941</td>
<td>450 West/9000 South U-Turn; 8775 South to 8871 South</td>
<td>Intersection Improvement</td>
<td>CMAQ_WFRC</td>
<td>$1,386,600</td>
<td>$1,292,727</td>
<td>Funding Removed</td>
<td>$1,292,727</td>
<td>2019</td>
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</table>

Sandy City requests that this project be removed to increase the level of available funding. The City will resubmit this project concept at a later time to compete for future programming.
Weber – 5500 So/5600 So (SR-97); 5600 West (SR-37) to 3000 West Pavement Rehabilitation (Purple Book) Program

Additional Funding from Un-programmed Transportation Solutions Program (TSP Funds)

Additional Funding

$500,000

Total Project Cost Estimate $1,750,000

Project will rotomill off the top 1.5 inches and overlay 1.5 inches to maintain the existing pavement transitions.
Weber – South Weber Drive (SR-60); SR-168 (North Gate HAFB) to US-89 Pavement Preservation (Orange Book) Program

- Project will apply pavement preservation treatments to increase the pavement life.

Additional Funding
- $1,000,000
- Total Project Cost Estimate $4,000,000

Additional Funding from Un-programmed Transportation Solutions Program (TSP Funds)
Salt Lake – 9270 South & State Street; 150 East to State Street
Intersection Improvements and Signal Installation
State St. and 10000 S. is a choke point for bicycle traffic. This project will allow for bike lanes on 10000 South by widening the north side of the intersection. A right turn pocket will also be added for WB traffic. 10000 South is identified by UCATS, WFRC, Salt Lake County, and Sandy City as a priority bicycle route.
During the peak travel hours the intersection of 9000 S/450 W causes significant delays due to congestion. An analysis was conducted for ways to mitigate and minimize congestion. This project consists of adding a U-turn on the north leg of the intersection in order to give an alternate for those making the westbound left movement.
Current Project Funding $3,453,000
Updated Project Cost $6,432,000
Project Cost Shortfall of $3,228,244

Federal Shortfall would be $2,792,798

Request is for additional Salt Lake/West Valley Urban STP funds $2,792,798

Additional Funding available from project cost savings and favorable bids on other STP projects
### New Project

#### Salt Lake/ West Valley Urban Area

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<tr>
<td>Salt Lake/ Tooele</td>
<td>UDOT</td>
<td>1-80</td>
<td>16443</td>
<td>1-80; Westbound Auxiliary Lane; SR-201 to SR-36</td>
<td>New Construction of an Auxiliary Lane</td>
<td>HSIP (Highway Safety Improvement Program)</td>
<td>$2,800,000</td>
<td>$0</td>
<td>New Project</td>
<td>$2,800,000</td>
<td>2019</td>
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Region Two is requesting to add a new project to construct an aux lane on westbound I-80 from SR-201 to SR-36. The construction of an aux lane will improve safety by reducing conflict points and minimizing current vehicular weaving movements. The additional funds for this request are available from unprogrammed HSIP funds, favorable bids on other Highway Safety projects, and from Region Two’s Transportation Solutions Program.

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<td>Salt Lake</td>
<td>White City</td>
<td>Sandy Canal</td>
<td>17405</td>
<td>Sandy Canal; Carnation Drive to 10600 South</td>
<td>Construct Section of Missing Bike/ Pedestrian Trail</td>
<td>UDOT R2 TAP (UDOT Region Two Transportation Alternatives Program)</td>
<td>$350,000</td>
<td>$0</td>
<td>New Funding</td>
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<td>2019</td>
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UDOT TAP Contribution $250,000, Local Contribution $100,000, Total Project Cost $350,000

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<tr>
<td>Salt Lake/ County</td>
<td>Salt Lake</td>
<td>8600 South</td>
<td>17372</td>
<td>8600 South; 1530 East to 1676 East</td>
<td>Construct Sections of Missing Sidewalk</td>
<td>UDOT R2 TAP (UDOT Region Two Transportation Alternatives Program)</td>
<td>$239,459</td>
<td>$0</td>
<td>New Funding</td>
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UDOT TAP Contribution $179,594, Local Contribution $59,865, Total Project Cost $239,459

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<tr>
<td>Tooele</td>
<td>Grantsville</td>
<td>Durfee Street</td>
<td>17366</td>
<td>Durfee Street; Quirk to Willow Street</td>
<td>Construct Sections of Missing Sidewalk</td>
<td>UDOT R2 TAP (UDOT Region Two Transportation Alternatives Program)</td>
<td>$233,270</td>
<td>$0</td>
<td>New Funding</td>
<td>$174,952</td>
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UDOT TAP Contribution $174,952, Local Contribution $58,318, Total Project Cost $233,270

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<td>4705 South</td>
<td>17368</td>
<td>4705 South; 1380 East to 1450 East</td>
<td>Construct Sections of Missing Sidewalk</td>
<td>UDOT R2 TAP (UDOT Region Two Transportation Alternatives Program)</td>
<td>$70,325</td>
<td>$0</td>
<td>New Funding</td>
<td>$52,744</td>
<td>2019</td>
</tr>
</tbody>
</table>

UDOT TAP Contribution $52,744, Local Contribution $17,581, Total Project Cost $70,325

<table>
<thead>
<tr>
<th>County</th>
<th>Sponsor</th>
<th>Facility</th>
<th>PIN</th>
<th>Project Location</th>
<th>Concept/ Type of Improvement</th>
<th>Funding Source</th>
<th>Project Estimated Cost</th>
<th>Currently Funded</th>
<th>Action</th>
<th>Funding Amount</th>
<th>Year</th>
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<tbody>
<tr>
<td>Salt Lake</td>
<td>Kearns/ SL Co</td>
<td>6000 South</td>
<td>17370</td>
<td>6000 South; 5600 West to 5565 West</td>
<td>Construct Sections of Missing Sidewalk</td>
<td>UDOT R2 TAP (UDOT Region Two Transportation Alternatives Program)</td>
<td>$41,190</td>
<td>$0</td>
<td>New Funding</td>
<td>$30,892</td>
<td>2019</td>
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</table>

UDOT TAP Contribution $30,892, Local Contribution $10,298, Total Project Cost $41,190

<table>
<thead>
<tr>
<th>County</th>
<th>Sponsor</th>
<th>Facility</th>
<th>PIN</th>
<th>Project Location</th>
<th>Concept/ Type of Improvement</th>
<th>Funding Source</th>
<th>Project Estimated Cost</th>
<th>Currently Funded</th>
<th>Action</th>
<th>Funding Amount</th>
<th>Year</th>
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</thead>
<tbody>
<tr>
<td>Salt Lake</td>
<td>Sandy</td>
<td>1700 East</td>
<td>1700 East; Wasatch Blvd to 11400 South</td>
<td>Construct Bike Lanes</td>
<td>UDOT R2 TAP (UDOT Region Two Transportation Alternatives Program)</td>
<td>$268,605</td>
<td>$0</td>
<td>New Funding</td>
<td>$150,000</td>
<td>2019</td>
<td></td>
</tr>
</tbody>
</table>

UDOT TAP Contribution $150,000, Local Contribution $118,605, Total Project Cost $268,605
Project will construct an auxiliary lane on WB I-80 from SR-201 to SR-36.

New Funding
$2,800,000

Total Project Cost Estimate $2,800,000

Project Funding from Un-programmed and Cost Savings from Highway Safety Improvement Program Funded projects.
Sandy Canal; Carnation Drive to 10600 South
Construct Section of Missing Bike/ Pedestrian Trail

Program Year 2019

<table>
<thead>
<tr>
<th>Estimated Cost</th>
<th>$ 350,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP Funding</td>
<td>$ 250,000</td>
</tr>
<tr>
<td>Local Funding</td>
<td>$ 100,000</td>
</tr>
</tbody>
</table>
8600 South; 1530 East to 1676 East
Construct Sections of Missing Sidewalk

Program Year
2019

Estimated Cost
$239,459

TAP Funding
$179,594

Local Funding
$59,865
Durfee Street; Quirk Street to Willow Street
Construct Sections of Missing Sidewalk

Program Year
2018

<table>
<thead>
<tr>
<th>Estimated Cost</th>
<th>$233,270</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP Funding</td>
<td>$174,952</td>
</tr>
<tr>
<td>Local Funding</td>
<td>$58,318</td>
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</tbody>
</table>
4705 South; 1380 East to 1450 East
Construct Sections of Missing Sidewalk

<table>
<thead>
<tr>
<th>Program Year</th>
<th>Estimated Cost</th>
<th>TAP Funding</th>
<th>Local Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$ 70,325</td>
<td>$ 52,744</td>
<td>$ 17,581</td>
</tr>
</tbody>
</table>
6000 South; 5600 West to 5565 West
Construct Sections of Missing Sidewalk

<table>
<thead>
<tr>
<th>Program Year</th>
<th>Estimated Cost</th>
<th>TAP Funding</th>
<th>Local Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$41,190</td>
<td>$30,892</td>
<td>$10,298</td>
</tr>
</tbody>
</table>
1700 East; Wasatch Blvd to 11400 South
Construct Bike Lanes

Program Year
2018

Estimated Cost

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP Funding</td>
<td>$ 150,000</td>
</tr>
<tr>
<td>Local Funding</td>
<td>$ 118,605</td>
</tr>
<tr>
<td>Total Estimated Cost</td>
<td>$ 268,605</td>
</tr>
<tr>
<td>County</td>
<td>Sponsor</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>SALT LAKE/ WEST VALLEY URBAN AREA</td>
<td></td>
</tr>
<tr>
<td>Salt Lake</td>
<td>UTA</td>
</tr>
<tr>
<td>Salt Lake</td>
<td>Murray/ UDOT</td>
</tr>
</tbody>
</table>

OGDEN/ LAYTON URBAN AREA

<table>
<thead>
<tr>
<th>County</th>
<th>Sponsor</th>
<th>PIN</th>
<th>Location/ Limits</th>
<th>Concept/ Type of Improvement</th>
<th>Estimated CMAQ Funds and Phasing (Fiscal Year)</th>
<th>Concept Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davis</td>
<td>UTA</td>
<td>15915</td>
<td>Davis County Ski Route Buses</td>
<td>Purchase 2 buses for seasonal service from parts of Davis County to Snow Basin Resort.</td>
<td>$912,830</td>
<td>$ - $ - $ - $ - $ - $ -</td>
</tr>
</tbody>
</table>
5c - FY 2018
Obligation Report

Wasatch Front Regional Council
February 21, 2019

Ben Wuthrich
Wasatch Front Regional Council
The Federal Highway Administration (FHWA) defines “obligation” as the federal government’s legal commitment to reimburse the States or other entities for the Federal share of a project’s eligible costs.

Thus, an obligated project is one that has been approved by the federal government for reimbursement.

- Obligated projects were not necessarily initiated or completed during this year.

- Obligated amounts reflected in this report also may not be equal to the final project cost.
### Project Process and Obligation of Funding

**Environmental/ Preliminary Engineering**

- **Design**
- **Right of Way**
- **Advertise/ Construct**
- **Closeout/ De-obligation**

---

#### SALT LAKE/ WEST VALLEY URBAN AREA

<table>
<thead>
<tr>
<th>County</th>
<th>Sponsor</th>
<th>House</th>
<th>Project Number</th>
<th>PIN</th>
<th>Project &amp; Program Information</th>
<th>Year Added to TIP</th>
<th>Estimated/Total Project Cost</th>
<th>Original Funds Programmed</th>
<th>Total Amount Obligated</th>
<th>Extent of Funding and Obligating (Fiscal Year)</th>
<th>Concept Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salt Lake</td>
<td>Salt Lake City</td>
<td>F-2076(3)</td>
<td>13083</td>
<td>13083</td>
<td>1390 East, 1300 South to 2300 South</td>
<td>2012</td>
<td>$13,099,000</td>
<td>$6,425,097</td>
<td>$1,347,874</td>
<td>$9,782,924</td>
<td>$0</td>
</tr>
<tr>
<td>Salt Lake</td>
<td>Salt Lake City</td>
<td>NEWPROJ</td>
<td>14095</td>
<td>14095</td>
<td>300 North &amp; 500 West</td>
<td>2016</td>
<td>$5,482,000</td>
<td>$2,500,000</td>
<td>$1,500,000</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Salt Lake</td>
<td>Salt Lake City</td>
<td>195</td>
<td>1114</td>
<td>1114</td>
<td>1200 East (SR-195) Phase 3 to 3900 South</td>
<td>2009</td>
<td>$12,416,077</td>
<td>$9,025,049</td>
<td>$46</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Salt Lake</td>
<td>Salt Lake City</td>
<td>195</td>
<td>11086</td>
<td>11086</td>
<td>4700 South, 4600 West to 5600 West</td>
<td>2012</td>
<td>$16,867,300</td>
<td>$11,875,049</td>
<td>$9,823</td>
<td>$2,857,711</td>
<td>$5,000</td>
</tr>
<tr>
<td>Salt Lake</td>
<td>Salt Lake City</td>
<td>Var</td>
<td>NEWPROJ</td>
<td>14090</td>
<td>Salt Lake Cross - Arrow Signal Detection Upgrade</td>
<td></td>
<td>$2,474,593</td>
<td>$109,794</td>
<td>$2,000</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

---

**FAA**
Statewide
FFY 2018 Federal Highway Funds Obligation
by Project Improvement Type

Federal & Matching Funds Obligated Statewide
($407,217,916)
WFRC Region
FFY 2018 Federal Highway Funds Obligation
by Project Improvement Type

Federal & Matching Funds Obligated within WFRC Region
($225,353,544)

- Pavement Preservation: $60,017,630
- Reconstruction or Capacity: $53,097,925
- Miscellaneous: $29,864,893
- Intersection/Safety: $34,121,032
- Bridge/Major Structure: $18,171,428
- Structure/Minor Structural Rehab: $4,402,182
- ATMS: $8,113,634
- Studies/Planning: $(38,002)
- Bike/Pedestrian & Transit: $1,781,875
Almost all Reconstruction or Capacity projects include active transportation components.
FFY 2018 Federal Transit Administration Funds
Obligation by Project Type

Federal & Local Matching Funds
(Total Amounts)

- Capital Improvements: $213,769,882
- Operation/Planning & Maintenance (O & M): $286,642,443
### WFRC Region

**2018 Projects with Federal Highway Funds Obligated / (De_Obligated)**

<table>
<thead>
<tr>
<th>PIN</th>
<th>PIN Status</th>
<th>Category</th>
<th>Project Location</th>
<th>County</th>
<th>Total Obl.</th>
<th>FA</th>
<th>STATE</th>
<th>LOCAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>16851</td>
<td>Active</td>
<td>other</td>
<td>N/A Annual Work Program</td>
<td>VARIOUS</td>
<td>$500,000</td>
<td>$500,000</td>
<td>$0</td>
<td>$0</td>
<td>$500,000</td>
</tr>
<tr>
<td>16857</td>
<td>Awarded</td>
<td>Roadway Minor Rehab - Purple Book</td>
<td>I-15; MP 318.70 - 323.70</td>
<td>DAVIS</td>
<td>$1,398,450</td>
<td>$1,398,450</td>
<td>$101,550</td>
<td>$0</td>
<td>$1,500,000</td>
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<tr>
<td>4950</td>
<td>Under Construction</td>
<td>Structures Bridge Replacement</td>
<td>Smith Rd over Weber River</td>
<td>MORGAN</td>
<td>$994,544</td>
<td>$994,544</td>
<td>$0</td>
<td>$0</td>
<td>$1,066,744</td>
</tr>
<tr>
<td>14776</td>
<td>Under Construction</td>
<td>Structures Bridge Replacement</td>
<td>City PA: 21-54; MP 2.31 - 2.31 &amp; 8400 W 3975 South</td>
<td>SALT LAKE</td>
<td>$734,093</td>
<td>$734,093</td>
<td>$53,207</td>
<td>$0</td>
<td>$787,400</td>
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<tr>
<td>14777</td>
<td>Awarded</td>
<td>Asset Management</td>
<td>City PA: 11064; MP 1.19 - 4.43 &amp; Route 11064 (6800 West / Iowa String Road) &amp; 2880 North and 150 North</td>
<td>BOXELDER</td>
<td>$426,061</td>
<td>$426,061</td>
<td>$30,939</td>
<td>$0</td>
<td>$457,000</td>
</tr>
<tr>
<td>11990</td>
<td>Active</td>
<td>Funding Pass Through</td>
<td>Project Planning Support - Weber &amp; Davis County</td>
<td>DAVIS</td>
<td>$300,000</td>
<td>$300,000</td>
<td>$0</td>
<td>$0</td>
<td>$300,000</td>
</tr>
<tr>
<td>11992</td>
<td>Active</td>
<td>Roadway Reconstr. - With Widening</td>
<td>Larson Lane; North Parleyville Road to Washington Blvd</td>
<td>WEBER</td>
<td>$226,414</td>
<td>$226,414</td>
<td>$0</td>
<td>$0</td>
<td>$226,414</td>
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<tr>
<td>15037</td>
<td>Close Out</td>
<td>Roadway Reconstr. - With Widening</td>
<td>SR-87; MP 53.51 - 12.35</td>
<td>WEBER</td>
<td>$1,740,000</td>
<td>$1,740,000</td>
<td>$120,352</td>
<td>$0</td>
<td>$1,860,352</td>
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<tr>
<td>13321</td>
<td>Close Out</td>
<td>Intersection Improvements</td>
<td>SR-933; MP 3.20 - 3.60</td>
<td>DAVIS</td>
<td>$67,676</td>
<td>$67,676</td>
<td>$4,914</td>
<td>$0</td>
<td>$72,591</td>
</tr>
<tr>
<td>13470</td>
<td>Closed</td>
<td>Roadway Preventive Maintenance</td>
<td>SR-204; MP 0.0 - 92 &amp; SR-204; MP 2.23 - 5.42</td>
<td>WEBER</td>
<td>$213,628</td>
<td>$213,628</td>
<td>$15,513</td>
<td>$0</td>
<td>$229,141</td>
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<tr>
<td>14042</td>
<td>Substantially Completed</td>
<td>Roadway Reconstr. - With Widening</td>
<td>City PA: 1410; MP 57 - 95 &amp; 1800 South Phase 3; 1350 West to 1100 West</td>
<td>DAVIS</td>
<td>$2,210,082</td>
<td>$2,210,082</td>
<td>$160,488</td>
<td>$0</td>
<td>$2,370,570</td>
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<tr>
<td>14043</td>
<td>Active</td>
<td>Roadway Reconstr. - With Widening</td>
<td>Buford Rd; 550 West (on Gentile) to 1000 West</td>
<td>DAVIS</td>
<td>$509,424</td>
<td>$509,424</td>
<td>$36,992</td>
<td>$0</td>
<td>$546,416</td>
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<tr>
<td>14843</td>
<td>Scoping</td>
<td>Roadway New Construction (New Alignment)</td>
<td>500 West 2000 South to SR-108</td>
<td>DAVIS</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$0</td>
<td>$726</td>
<td>$10,726</td>
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<tr>
<td>14966</td>
<td>Closed</td>
<td>other</td>
<td>FY 2017 WFRC CPC Planning</td>
<td>SALT LAKE</td>
<td>($315,000)</td>
<td>($315,000)</td>
<td>$0</td>
<td>$0</td>
<td>($315,000)</td>
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<tr>
<td>16250</td>
<td>Physically Complete</td>
<td>Roadway Minor Rehab - Purple Book</td>
<td>I-15; MP 319.50 - 341.80 &amp; I-15; MP 319.50 - 341.80 &amp; Various Locations</td>
<td>VARIOUS</td>
<td>$699,225</td>
<td>$699,225</td>
<td>$53,775</td>
<td>$0</td>
<td>$750,000</td>
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<tr>
<td>16849</td>
<td>Active</td>
<td>other</td>
<td>N/A Annual Work Program</td>
<td>SALT LAKE</td>
<td>$390,260</td>
<td>$390,260</td>
<td>$0</td>
<td>$0</td>
<td>$390,260</td>
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<tr>
<td>8110</td>
<td>Awarded</td>
<td>Signal and/or Lighting Project</td>
<td>SR-52; MP 2.78 - 1.04 &amp; City PA: 2082; MP 11.32 - 12.51 &amp; City PA: 2116; MP 2.98 - 3.18</td>
<td>SALT LAKE</td>
<td>$295,756</td>
<td>$295,756</td>
<td>$21,351</td>
<td>$0</td>
<td>$315,097</td>
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<tr>
<td>8112</td>
<td>Closed</td>
<td>Roadway Reconstr. - Without Widening</td>
<td>City PA: 2264; MP 0.0 - 88</td>
<td>SALT LAKE</td>
<td>($33,972)</td>
<td>($33,972)</td>
<td>$0</td>
<td>($288)</td>
<td>($34,260)</td>
</tr>
<tr>
<td>8565</td>
<td>Abandoned</td>
<td>Roadway Reconstr. - With Widening</td>
<td>HIGHLAND DRIVE @ 1.515; 1.215 Warn Amp to LA CRISTA</td>
<td>SALT LAKE</td>
<td>($289,013)</td>
<td>($289,013)</td>
<td>$0</td>
<td>$0</td>
<td>($289,013)</td>
</tr>
<tr>
<td>11083</td>
<td>Active</td>
<td>Roadway Reconstr. - With Widening</td>
<td>1300 East; 1300 South to 2000 South</td>
<td>SALT LAKE</td>
<td>$512,765</td>
<td>$512,765</td>
<td>$37,325</td>
<td>$0</td>
<td>$550,000</td>
</tr>
</tbody>
</table>
Trans Com
February 2018

SB 136
- Implement a Road User Charge (RUC) – Jan 2020
  - alternative to paying a flat fee for electric vehicles:
    - Eligible Types: EV, PEHV, Hybrids
- Establish a (RUC) Advisory Committee
- Report annually on program & Future pilot projects

SB 72
- Rulemaking authority for UDOT
- Rulemaking authority for Transportation Commission
- UDOT/DMV information sharing
Gas Tax Revenue Decline Across the Nation

Impact of Construction Cost Inflation

Impact of Fuel-efficiency Gains

Utah efforts:

- Indexing
- Mileage-based RUC
Size & Growth of Utah’s Vehicle Fleet

Total Registered Vehicles

2,594,746 (2019)

89.5%

8.5%

2%

Year-over-year Growth (%)

- EVs
- PHEVs & Gas Hybrids
- All Others

5,526 Vehicles (Feb 2019)

42,770

5,526,450

2018–19

2017–18

2016–17

2015–16

0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50% 55%

0.1% 0.2% 1.5% 2%
Average Annual Gas Tax Payments

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>MPG</th>
<th>State Tax</th>
<th>Federal Tax</th>
<th>Annual Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedan</td>
<td>25</td>
<td>$301</td>
<td></td>
<td>$301</td>
</tr>
<tr>
<td>Pickup</td>
<td>15</td>
<td>$501</td>
<td>$564</td>
<td>$564</td>
</tr>
<tr>
<td>Heavy Truck</td>
<td>6</td>
<td>$1,409</td>
<td></td>
<td>$1,409</td>
</tr>
<tr>
<td>Gas Hybrid</td>
<td>50</td>
<td>$150</td>
<td></td>
<td>$150</td>
</tr>
<tr>
<td>EV</td>
<td></td>
<td>$0</td>
<td></td>
<td>$0</td>
</tr>
</tbody>
</table>

1. Based on 30 cents/gal State tax (gasoline/diesel) and 15,542 miles driven annually by average Utah vehicle.
2. Based on Federal tax of 18.4 cents/gal for gasoline and 24.4 cents/gal for diesel.
3. Pickup truck costs listed for both gasoline and diesel values; heavy truck costs listed for diesel only.
### National

<table>
<thead>
<tr>
<th>Type</th>
<th>RANGE</th>
<th>AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVs</td>
<td>$50–$200</td>
<td>$112</td>
</tr>
<tr>
<td>PHEVs</td>
<td>$30–$130</td>
<td>$72</td>
</tr>
<tr>
<td>Gas Hybrids</td>
<td>$20–$100</td>
<td>$57</td>
</tr>
</tbody>
</table>

### Utah

<table>
<thead>
<tr>
<th>Type</th>
<th>2019</th>
<th>2020</th>
<th>2021*</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVs</td>
<td>$60</td>
<td>$90</td>
<td>$120</td>
</tr>
<tr>
<td>PHEVs</td>
<td>$26</td>
<td>$39</td>
<td>$52</td>
</tr>
<tr>
<td>Gas Hybrids</td>
<td>$10</td>
<td>$15</td>
<td>$20</td>
</tr>
</tbody>
</table>

* Fees are indexed to CPI after 2021

- **Considered annual fees** (10 states)
- **Adopted annual fees** (19 states)
- **Adopted one-time fees** (1 state)
# Elements of a Utah RUC System Based on Advisory Committee Input

## Data Collection Tech
- OBD-II GPS Devices 16
- Odometer Capture 2
- Telematics 2
- Smartphone Apps 15

## Vehicle Types
- EV 16
- PHEV 16
- Gas Hybrid 16
- Autonomous 0
- Gas/Diesel 16
- Heavy Truck 2

## Systems/Processes
- DMV Registration 0
- Out-of-state Detection 16
- Public/Private Roads 16
- Regional Interop. 14
- Tolling Integration 12
- Paved/Unpaved Roads 0
- Federal/State Lands 0

---

- Element at launch
- Element under discussion
- Potential future element
- Number of other states considering or using element
Questions?
Quality of Life in Utah

Utah has an enviable quality of life. We enjoy a thriving economy, abundant recreation opportunities, friendly neighborhoods and vibrant communities, all supported by strategic investments in our transportation system.

Well-Being in U.S., 2017

Highest Well-Being States

1. South Dakota
2. Vermont
3. Hawaii
4. Minnesota
5. North Dakota
6. Colorado
7. New Hampshire
8. Idaho
9. Utah
10. Montana


Despite improvements in the economy, Utahns’ perceptions of their community quality of life has declined.

Utah Quality of Life Index

While year-to-year variation is small, the index has seen a decrease since 2013.

Growth is Challenging Our Quality of Life

Projected growth is causing concerns among Utahns. As population continues to grow at a record pace, transportation planning and development plays a key role in keeping Utah moving, facilitating robust economic development and maintaining a high quality of life.

Utah’s Growth

• Third fastest growing state
• St. George (metropolitan) and Heber (micropolitan) are ranked first for fastest growth in their respective geographic categories and in the nation

Source: Kem C. Gardner Policy Institute, The University of Utah, Utah at a Glance: Fact Sheet, January 2018
Kem C. Gardner Policy Institute, The University of Utah; U.S. Census Bureau Estimates by County, Metropolitan, and Micropolitan Areas 2017; Fact Sheet, March 2018

What could most improve your area as a place to live?

Respondents focus biggest improvements on transportation, housing affordability and air quality.

Importance of Transportation

How we plan for the projected growth and its impact to quality of life is directly connected to our transportation system. Existing goal statements from government agencies, transportation partners and related stakeholders’ focus on the following:

• Centers/Smart Growth
• Economy
• Quality of Life
• Prosperous
• Safety
• Air Quality
• Balance
• Environment
• Opportunity
• Preservation
• Efficiency
• Health
• ROI / Cost
• Land Use
• Community
• Water
• Freight
• Recreation
• Mobility

Utah’s Transportation Vision: Pathway to Life Quality

Top 5 Responses

<table>
<thead>
<tr>
<th>Improvements</th>
<th>2011</th>
<th>2013</th>
<th>2015</th>
<th>2018</th>
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<tbody>
<tr>
<td>Reduce traffic</td>
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<tr>
<td>Improve affordability of housing</td>
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<tr>
<td>Improve air quality</td>
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<tr>
<td>Improve roads and sidewalks (better condition, lighting)</td>
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<tr>
<td>Improve public transportation (more bus/train routes)</td>
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</tbody>
</table>

Source: Utah Foundation, Quality of Life Index, 2018

Counts Included: Box Elder, Davis, Salt Lake, Utah, Weber

Source: Kem C. Gardner Policy Institute, The University of Utah; Utah’s Long-Term Demographic and Economic Projections Summary, Research Brief, July 2017

Wasatch Front Population Growth

Source: Salt Lake Chamber; Y2 Analytics, Utah Housing Crisis Research: Obstacles & Opportunities in Public Attitudes, 2018
Connected and Automated Vehicles: Dealing with a Changing Paradigm

Blaine D Leonard, P.E., F.ASCE
Technology & Innovation Engineer
Utah Department of Transportation
A New Transportation Paradigm
And a New Driver
The UDOT CAV Program

THE FIVE PILLARS OF THE UDOT CAV PROGRAM

Connected and Automated Vehicles (CAV) are advancing rapidly and will soon be a reality on our roadways. UDOT believes that CAV represents the next opportunity for a significant leap forward in both traffic safety and mobility. It is UDOT’s goal to be at the forefront of CAV development and implementation, and in the process to accelerate the realization of the safety and operational benefits of these technologies.

TECHNOLOGY ADVANCEMENT
Developing UDOT’s technological capabilities is crucial to advancing the state of the practice in Utah and across the nation.

Priorities: Expand the implementation of Multi-Modal Intelligent Traffic Signal System (MITSS) for the TRIP RFP project and to more operations key routes around the state.

ACADEMIC COLLABORATION
Collaboration with Utah’s universities is critical to a vibrant and successful CAV community.

Priorities: Data analysis, research facilities investigations, development of safety applications.

POLICY & LEGISLATION
 Oversight for safety and efficiency is instrumental in CAV advancement. Policy and legislative decision makers need to be well informed.

Priorities: Legislative coordination, localization of demonstrations, task force establishment.

PRIVATE SECTOR ENGAGEMENT
Strategic partnerships will strengthen the success of UDOT’s CAV program and can be instrumental in bringing high-paying jobs to Utah.

Priorities: Development of safety applications, product testing and development.

OUTREACH & GROWTH
Strategically sharing the UDOT CAV story will attract partners and strengthen economic development.

Priorities: Strategic outreach plan, education and marketing materials.

Keeping Utah Moving
Automated Vehicles use various sensor technologies:

- LiDAR
- Digital Imagery (camera)
- Radar Sensors
- GPS

... to sense their surroundings and take some (or all) driving functions from the human driver

INFORMATION BASED ON WHAT THE VEHICLE CAN “SEE”
The **Connected Vehicle** system uses wireless technologies to exchange information with:

- Other vehicles (V2V),
- Roadside infrastructure (V2I), and
- Other travelers (peds, bikes, etc) (V2X)

...to help the driver **avoid hazards** and drive more **efficiently**

**INFORMATION BASED ON WHAT THE VEHICLE CAN “LEARN”**
Redwood Road Connected Vehicle Project

• Transit Signal Priority (TSP)
  • Grant conditional priority when bus is behind schedule
  • Goal to improve transit schedule reliability
• DSRC wireless communication technology
  • 24 signalized intersections
  • 10 UTA buses
• Operational since Nov 2017
• Schedule reliability improved by 6%
  • Minimal impact to other traffic

Schedule reliability improvement chart
Additional Deployments

- Provo-Orem BRT Project (UVX)
  - Transit Signal Priority using DSRC
    - 10.5-mile corridor
    - 47 Signalized Intersections
    - 25 Buses
  - Operational December 3, 2018

- Snow Plow Pre-emption Project
  - Salt Lake Valley – 5 corridors
  - 55 Additional Intersections
  - 46 Snow Plows
  - Operational in March 2019
Connected Vehicle Data Ecosystem

- Manage the expected explosion of data
  - Processing data into actionable information
  - Data storage decisions
  - Securing the data
  - Maintaining privacy

- Software applications
  - Roadside applications
  - On-board implementation
    - Pull vehicle data
    - Push information to vehicles
    - Work with automakers

- Expand hardware deployment

- Integrate with UDOT TOC
AV Shuttle Project

- Deploy AV Shuttle in several locations
  - Driverless shuttle (with a “host”)
  - Vehicle being leased from EasyMile
  - April 2019 – March 2020
- Joint UDOT / UTA Project
- Study potential uses and capabilities
  - First mile – last mile solution
  - Operational characteristics
- Broad discussion about vehicle autonomy
  - Evaluate public responses / attitudes / trust
Autonomous Vehicle Legislation

• HB 101 in 2019 Legislative session
  • Sponsor: Rep. Robert Spendlove
  • Developed by coalition of agencies and private sector interests
  • Passed the House (yesterday)
  • Senate Floor Sponsor: Sen. David Buxton

• Issues include:
  • Permission to operate on Utah roads
    • Facilitate testing and operation
  • Definitions of terms
  • Clarification of registration / responsibility
  • Monitoring safe (or unsafe) behavior